# UNITED STATES PATENT AND TRADEMARK OFFICE

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/755,715 | 01/05/2001 | Robert E. Sobol | 10003856-1 | 5166 |

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| EXAMINER |
|---|
| NGUYEN, KIMBINH T |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2671 | |

DATE MAILED: 09/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

| | Application No. | Applicant(s) |
|---|---|---|
| **Office Action Summary** | 09/755,715 | SOBOL, ROBERT E. |
| | Examiner | Art Unit | |
| | Kimbinh T. Nguyen | 2671 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on <u>07 June 2004</u>.

2a)☒ This action is **FINAL.**      2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-33,35-40,44 and 46-55* is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *44 and 54* is/are allowed.

6)☒ Claim(s) *1-33,35-40,46-53,55* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All  b)☐ Some * c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)☐ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: _____.

## DETAILED ACTION

1.    This action is responsive to amendment filed 06/07/04.

2.    Claims 1-33, 35-40, 44, 46-55 are pending in the application.

### *Claim Rejections - 35 USC § 102*

3.    The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4.    Claims 1-5, 7-12, 15-19, 23, 26, 28, 30, 31, 33, 36-40, 46-51 and 55 are rejected

under 35 U.S.C. 102(e) as being anticipated by Edanami, U.S. Patent No. 6,297,846.

**Claims 1, 9 and 16**, Edanami discloses a system for automatically cropping

graphical images (column 19 lines 13-20), comprising; memory for storing digital data

that defines a graphical image captured by the system (fig 2, #12 and column 4 lines

64-67); an object detector configured to perform a search of said digital data for an

object of a particular type and to automatically identify, based on said search, a portion

of said digital data that defines an image of an object of said particular type within said

graphical image (column 4 lines 67 through column 5 line 3), and an image cropper

configured to automatically crop said digital data (column 19 lines 13-20) based on a

position of said object image within said graphical image (column 4 lines 67 through

column 5 line 3), said image cropper configured to determine said position of said object

image within said graphical image based on said portion automatically identified by said

object detector (face position detector; column 4 lines 67 through column 5 line 3),

wherein the cropping operation performed on the graphical image is not based on any

other graphical image captured by the system (only source picture or graphical image

captured by the camera 51 (second embodiment) or camera 1 or camera 11 (the first

embodiment); col. 13, lines 18-23).

**Claims 2, 10 and 17,** Edanami discloses wherein said object image is an image of

a person's face, wherein said object detector is configured to search said digital data for

facial images (column 4 line 67 through col. 5, line 6).

**Claims 3, 11 and 18,** Edanami discloses wherein the cropping operation is based

on a size of said object image (column 5 lines 1-10).

**Claims 4, 12 and 19,** Edanami discloses wherein the cropping operation is based

on said position of said object image such that said object image is substantially

centered between two edges of said graphical image (the clipping position setting circuit

16 with the center position of the face; col. 9, lines 20-23, lines 56-61).

**Claim 5,** Edanami discloses a system for automatically cropping graphical images

(column 19 lines 13-20), comprising: memory for storing digital data that defines a

graphical image (column 4 lines 64-67); an object detector configured to analyze said

digital data and to automatically identify a graphical object within said graphical image

(column 4 lines 64-67 through column 5 line 3); and an image cropper configured to

automatically identify, based on a position of the graphical object within the graphical

image, the graphical object as an object to be removed from the graphical image (an

image area from which a portrait picture of the subject participant will be cut out; col. 4,
lines 30-37; col. 5, lines 6-11) and to automatically crop said digital data based on the
determination such that said graphical object is removed from said graphical image (col.
5, lines 16-27; col. 13, lines 18-20).

**Claim 7,** Edanami discloses an image capturing device configured to receive an
image of a scene and to produce said digital data based on said image received by said
image capturing device (fig 1 , #1 ).

**Claim 8,** Edanami discloses wherein said image capturing device includes a lens
for receiving said image of said scene and an image converter for producing said digital
data based on said image of said scene (lens from camera 11, fig 2).

**Claim 15,** Edanami discloses a means for receiving an image of a scene and for
producing said digital data based on said image received by said receiving means (col.
4, lines 15-26; fig 1).

**Claim 23,** Edanami discloses wherein said object detector is configured to make a
determination as to whether said portion defines a facial image (column 4 line 67
through col. 5, line 3).

**Claim 26,** Edanami discloses wherein said graphical object is an image of a face
(column 4, line 67).

**Claim 28,** Edanami discloses the step of making a determination as to whether
said object image is a facial image (col. 4, lines 24-39), wherein said cropping step is
based on said determination (col. 5, lines 29-36; fig 2).

**Claims 30 and 33**, Edanami discloses a system for automatically cropping graphical images (column 19 lines 13-20), comprising: an image capturing device configured to capture graphical images (the camera 11 is set up in such a way that a source picture 42 is captured; col. 11, lines 37-45); memory for storing digital data that defines a graphical image (column 4 lines 64-67); an object detector configured to make a determination as to whether a portion of said digital data defines a facial image (a face position detector circuit 14; column 4 line 67); and an image cropper configured to automatically perform a cropping operation on said graphical image based on said determination, wherein the cropping operation is not based on any image captured by the image capturing device other than the graphical image (only source picture or graphical image captured by the camera 51 (second embodiment) or camera 1 or camera 11 (the first embodiment); col. 13, lines 18-23).

**Claim 31** Edanami discloses wherein said image cropper is configured to perform the cropping operation, if said portion defines said facial image, based on a position of said facial image with said facial image within said graphical image (col. 7, line 56 through col. 8, line 56).

**Claim 36**, Edanami discloses a method for cropping a graphical image (fig 18A), comprising the steps of: detecting a plurality of faces in the graphical image (figs 19 A-E); automatically cropping the graphical image (col. 20, lines 5-27); determining if one of the faces is close to a center of the graphical image (fig 19B; col. 9, lines 54-62; col. 10, lines 43-47), wherein the cropping step is based on the determining step (col. 11, lines 20-36).

**Claim 37**, Edanami discloses determining a location in the graphical image of each of the plurality of faces (fig 19B).

**Claim 38**, Edanami discloses wherein the step of cropping the graphical image comprises positioning one of the plurality of faces closer to the center (fig. 19 B).

**Claim 39**, Edanami discloses wherein if one face of the plurality of faces is close to the center, then cropping the graphical image to move the one face closer to the center (fig 19 B).

**Claim 40**, Edanami discloses wherein if one face of the plurality of faces is closer to the center, then cropping the graphical image to remove at least one other face of the plurality of faces (figs 19 B-E).

**Claim 46**, Edanami discloses the image cropper is configured to automatically identify said graphical object as an object to be removed based on a whether said graphical object is close to an edge of said graphical window 9col. 19, line 57 through col. 20, line 27, figs. 18 and 19).

**Claim 47**, the rationale provide in the rejections of claims 1 and 4 are incorporated herein.

**Claim 48**, the rationale provide in the rejection of claim 10 is incorporated herein.

**Claim 49**, Edanami discloses the mage cropper is configured to automatically remove (col. 19, lines 13-24) at least one of said detected objects that is not identified as an object of interest by said image cropper (col. 19, line 24 through col. 20, line 27).

**Claim 50**, Edanami discloses the image cropper is configured to identify said at least one object as an object of interest based on whether said at least one object is close to a center of said graphical image (col. 9, line 55 through col. 10, line 47).

**Claim 51**, Edanami discloses detecting an object within said graphical image (face position detector; col. 4, lines 6-10); determining that said object is close to an edge of said graphical image (edge detection image; col. 15, lines 10-15; fig. 10 shows two objects are closed to the edge); and automatically removing said object from said graphical image based on said determining (the image clipping circuit 63 cuts a portrait picture out of the source picture captured by the camera, depending on a predetermined clipping processing mode; col. 18, lines 22-24).

**Claim 55**, Edanami discloses automatically identifying is based on whether said at least one face is close to a center of said graphical image (fig. 19A).

## *Claim Rejections - 35 USC § 103*

5.      The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6.      Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Edanami (6,297,864).

**Claim 21**, although Edanami does not specifically disclose the searching and cropping steps are automatically performed in response to said storing step. However,

Edanami teaches that the system automatically tracks any movement of the participant

if it is within the sight of the fixed wide-angle camera. More specially, the portrait picture

is cut out of the capture image (col. 2, lines 2-15). It would have been obvious to one of

ordinary skill in the art because Edanami is clipping images from the movement of the

participants. Therefore a complete frame with the exact position would have to be

stored first before the cropping could take place, otherwise you might not have the

complete image with the area of interest.

7.      Claims 6, 14, 22, 27, 29, 35 and 53  are rejected under 35 U.S.C. 103(a) as being

unpatentable over Edanami in view of Parulski et al., U.S. Patent No. 6,650,366.

**Claims 6, 14, 22, 27,** Edanami does not disclose an input device for receiving an

input from a user; and a system manager configured to enable said image cropper

based on said user input. This is disclosed in Parulski et al. in fig 1. It would have been

obvious to one of ordinary skill in the ad to set the cropping based on user input as in

Parulski with the system of Edanami because this would allow more flexibility in the

cropping process.

**Claims 29 and 35,** Edanami discloses that the object image is a facial image (fig

2). However, Edanami does not disclose wherein cropping step comprises the step of

removing said object image from graphical image. This is disclosed in Parulski et al in

fig 1. It would have been obvious to one of ordinary skill in the art to set the cropping

based on user input as in Parulski with the system of Edanami because this would allow

more flexibility in the cropping process.

**Claim 53**, Parulski discloses displaying said graphical image (image is printed; fig. 4, #94; col. 2, lines 60-65). It would have been obvious to one of ordinary skill in the art to print the output image as in Parulski with the system of Edanami because this would create an output image of any size to be printed; col. 2, lines 64-65).

8.      Claims 13, 20, 24, 25, 32 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Edanami in view of Riley, U.S. Patent No. 6,009,197.

**Claims 13, 20, 24 and 32**, Edanami discloses wherein said cropping means crops said digital data based on said position of said object image (fig 2). However, Edanami does not disclose wherein said object image is completely removed from said graphical image. This is disclosed in Riley in column 3 lines 49-54. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use cropping to remove images as in Riley with the system of Edanami because this would get rid of unwanted areas and therefore reduce the size of data and the memory required to store it.

**Claim 25**, Edanami discloses wherein the object image comprises an image of a face (column 4 line 67).

**Claim 52**, the rationale provided in the rejections of claims 10, 25 and 26 are incorporated herein.

### *Allowable Subject Matter*

9.      Claims 44 and 54 are allowed.

The following is an examiner's statement of reasons for allowance:

The prior art does not teach the automatically cropping further comprises moving the face away from a center of the picture.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### *Response to Arguments*

10.     Applicant's arguments filed 06/07/04 have been fully considered but they are not persuasive. With respect to the amendments of claim 1, Edanami performs cropping operation of the graphical image or source picture based on within the graphical image or source image which has been captured by the captured device (camera 1 or camera 11 of the first embodiment, camera 51 of the second embodiment); it would have been obvious for this limitation because either in the disclosure of the invention, the applicants did not describe this feature.

Applicant's amendment necessitated the new ground(s) of rejections of the new claims presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the
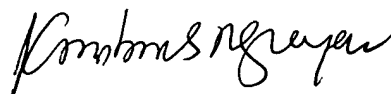
shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.


11.     Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Kimbinh T. Nguyen whose telephone number is (571)

272-7644. The examiner can normally be reached on Monday to Thursday from 7:00

AM to 4:30 PM. The examiner can also be reached on alternate Friday from 7:00 AM to

3:30 PM.

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Ulka Chauhan can be reached at (571) 272-7782. The fax phone number for

the organization where this application or proceeding is assigned is (571) 273-8300.

        Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).


September 6, 2005


KIMBINH T. NGUYEN
PRIMARY EXAMINER